974-5.

BUFFALO VENTILATING FANS

DISK FANS, PROPELLER FANS, and "BABY CONOIDAL" FANS





Installation in rear of one of Huyler's Buffalo stores.

BULLETIN NO. 262

BUFFALO FORGE COMPANY

Buffalo, N. Y.

New York

Philadelphia Charlotte, N. C. Pittsburgh

Detroit

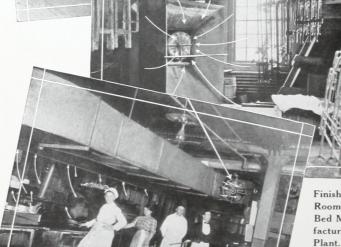
Chicago

St. Louis Denver Los Angeles





Factory Work Room



Finishing Room of Bed Manufacturing Plant.

Restaurant Kitchen

The function of a Disk Fan should not be mistaken for that of an imagination, as it were, without lowering the temperature or giving ordinary electric fan. The latter only stirs the air-appeals to your

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Buffalo Electric Disk Fans



Electric Disk Fan. This style made in three sizes, viz.: 18 in., 24 in., and 30 in. listed below.

even the slightest amount of ventilation. A "Buffalo" Disk Fan gives real ventilation.

Open windows and doors are remarkably ineffective in procuring natural ventilation, because the free movement of air depends on the difference in temperature as between the inside and outside. In summer—when ventilation is needed the most—this difference is too small to be effective.

Buffalo Electric Disk Fans are of the most advanced type. The motor is secured to the frame of the disk wheel by means of a bracket on the smaller sizes and by a tripod in sizes from 36 inches and up. No floor space or supports are necessary. Just bolt the frame to an opening in the wall or in a window, connect the wires and you have the most compact and efficient ventilating system available.

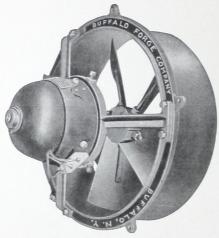
In manufacturing establishments the Disk Fan can be applied with excellent results to a great variety of purposes. In the finishing rooms it removes the noxious fumes from paints, oils, varnishes and other finishing materials.

	Electric I	Disk Fans		Direct	Current	Alternating Current 1,2,3 phase, 60-cycle		
Size	Voltage of Motors	Cubic Ft. Air Per Minute	Approx. Weight Complete	Speed R.P.M.	List Prices	Speed R.P.M.	List Prices	
18 in. 24 in. 30 in.	110-220 110-220 110-220	2200 4000 6200	125 lbs. 200 lbs. 300 lbs.	1000 900 800	\$ 90.00 112.50 140.00	1120 850 850	\$110.00 160.00 230.00	

NB. Starting rheostats are not required. Larger sizes on next page.



Buffalo Electric Disk Fans



Buffalo Disk Fan with Peerless Motor. This style is made in sizes from 36 in. up.

In manufacturing processes it removes dust, lint, steam and overheated air and keeps the efficiency of the men at a high point.

In boiler and engine rooms, lavatories, etc., it removes the excessive heat and foul air better, and at less cost, than at any other device.

In hotels, restaurants, department stores, theaters, and other public places, the Disk Fan can easily be installed so as to be completely concealed, without affecting its efficiency.

In such places no more efficient remedy could be devised for the comfort of patrons and employes than the Disk Fan. Its operation is noiseless, and no attention is required except occasional oiling.

Tell us the size of the room you want to ventilate and the conditions, and we will recommend a suitable outfit.

Fitted with Direct Current Motors. General Electric or Peerless Makes.

Size	Volt of	Speed	Cu. Ft. of	Weight	List Price	List Price
	Motor	R. P. M.	Air per Min.	Complete	Gen. Electric	Peerless
36 in.	110	525	8800	450 lbs.	\$320.00	\$300.00
	220	525	8800	450 lbs.	327.50	310.00
	500	525	8800	450 lbs.	337.50	320.00
42 in.	110	450	12000	625 lbs.	412.50	400.00
	220	450	12000	625 lbs.	425.00	410.00
	500	450	12000	625 lbs.	437.50	425.00
48 in.	110	400	18000	800 lbs.	495.00	487.50
	220	400	18000	800 lbs.	512.00	500.00
	500	400	18000	800 lbs.	525.00	512.50

Prices include starting rheostats. A speed regulator giving 50 per cent. variation, can be furnished at slight additional cost.



Buffalo Electric Propeller Fans



The uses of the Buffalo Propeller fans are essentially the same as of the Disk Fans described on the foregoing pages. The propeller fans are used in preference to the latter where the space available for the fan is so small that it becomes a matter of obtaining a fan of the smallest possible dimensions.

In this respect a Buffalo Propeller Fan is unequalled. Its capacity, size for size, is from 25% to 40% greater than that of a disk fan. This higher capacity has been obtained by the peculiar propeller-like design of the blades.

The angle and curvature of the blades is correct, causing the air to pass through the fan in a direction parallel to its axis, with uniform velocity throughout the entire area. Back flow is impossible, even though the delivery is against pressure.

Size	Voltage of Motor	R. P. M.	Cu. Ft. of Air Per Minute	Approx, Wt. Complete	List Price Gen. Electric	List Price Peerless
18	110 220 500	800 800 800	2850	200 lbs. 200 lbs. 200 lbs.	\$160.00 165.00 170.00	\$155.00 162.50 170.00
24	100 220 500	650 650 650	5120	300 lbs. 300 lbs. 300 lbs.	195,00 200.00 205.00	182,50 190,00 195,00
30	110 220 500	525 525 525	8100	450 lbs. 450 lbs. 450 lbs.	240.00 245.00 250.00	235,00 240,00 247,50
36	110 220 500	425 425 425	11350	625 lbs. 625 lbs. 625 lbs.	385.00 395.00 405.00	360.00 372.50 385.00

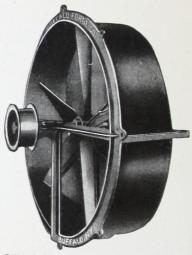


Oil Ring Bearings

BUFFALO FORGE COMPANY

Buffalo Pulley Disk Fans





Pulley Disk Fan---bearings on one side---made in sizes from 18" up to 48"

Pulley Disk Fan--standard bearings---made in sizes from 54" and up.

By an ingenious system used only in the construction of the "Buffalo" fans, an exceptionally fine balance of the wheel is obtained, so that they will run at very high speeds without vibration, smoothly and noiselessly.

ALL SIZES UP TO AND INCLUDING 48-INCH DIAMETER, ARE NOW MADE WITH THE BEARINGS ON ONE SIDE ONLY.

This avoids the troublesome and dangerous practice of reaching through the fan

blades to oil up.

THE BEARINGS ARE OF THE IMPROVED "BUFFALO" OIL RING TYPE, extra long, babbitted, and with oil grooves which distribute the oil evenly over the entire wearing surface.

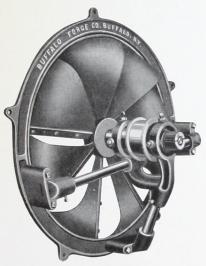
With the fan running continuously at high speeds, these bearings remain cool and require but an occasional re-oiling. The oil reservoirs are made of ample size with that end in view.

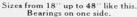
SPECIFICATIONS

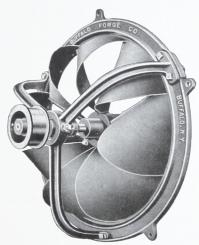
Size	Normal Speed	Cu. Ft. Air per Minute			Weight Lbs.	List Price	
18	1000	2200	0.25	2 x 4	75	\$40.00	
24	. 800	4000	0.50	2 x 4	100	50.00	
30	650	6200	0.75	23 x 6	170	65.00	
36	525	8800	1.00	3 x 7	230	85.00	
42	450	12000	1.50	3½ x 8	325	110.00	
48	400	18000	2.00	4 x 9	445	125.00	
5+	350	21000	2.50	4 x 9	560	175.00	
60	320	25000	3.00	5 x 10	630	250.00	
72	265	36000	5.00	5½ x 12	820	300.00	
84	227	50000	7.50	6 x 14	990	350.00	



Buffalo Pulley Propeller Fan







Sizes from 54" and up like this. Bearings on both sides,

The Buffalo propeller fan has a larger capacity for its size than disk fan types, and is therefore recommended where the available space is small.

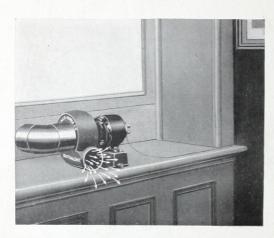
The angle and curvature of the blades cause air to be delivered without the usual back draft through the center of the fan, even against maximum resistance. The important point aimed at—uniform velocity of the air over the entire area—has been gained with singular success. Perfect alignment of the blades at the outer edge and absence of vibration is secured by rigidly attaching the entire width of the broad blade at this end to the steel ring. The straight side of each vane is similarly re-enforced by a steel bar, which is fitted at each end into the hub and ring like a spoke. This gives superior strength to the fan just where it is needed.

PULLEY PROPELLER FANS

Size	Normal Speed	Cu. Ft. Av. Per Minute	Horse Power Required	Size of Pulley	Approx. Weight	List Prices
18	900	3200	0.8	2 x 4	75	\$40.00
24	800	6300	1.4	2 x 4	100	50.00
30	650	10000	1.8	23 x 6	175	65.00
36	525	14000	2.4	3 x 7	240	85.00
42	450	19300	3.2	31 x 8	325	110.00
48	400	25200	4.	4 x 9	450	125.00
54	350	32000	5.	4 x 9	575	175.00
60	320	36000	7.20	5 x 10	640	250.00
72	265	56000	9.70	5 1 x 12	825	300.00
84	226	77000	12.50	6 x 14	1000	350.00



"Baby Conoidal" Ventilating Sets

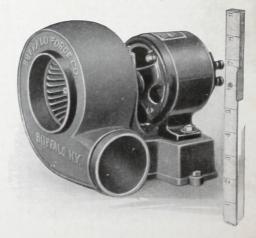


This shows a simple elbow connection which anyone can fix up, whereby fresh air is taken directly from the outside and blown into the room.

obtained where it is desired to exhaust smoke, fumes and hot air.

The relatively slow speed of the "Baby Conoidal" is one of the points which contribute to its silence; its "hum" cannot be heard except by laying your ear close up against it. A most convenient feature is that the fan case can be swung around to discharge in any desired direction. Cord and plug are furnished free with each outfit, so that it can be attached to a lamp socket without expense for installing. All the motors are furnished for 110 or 220 volts. The A. C. motors are all single phase, 60 cycles. Give particulars about current when ordering. The "Conoidal" design is the latest word in high efficiency multi-blade fan construction. The larger sizes of this fan met with such instant and signal success wherever the best was appreciated, that we perfected this small electric outfit for general ventilating, blowing and exhausting purposes.

This fan furnishes a very large volume of air at a relatively low pressure, the efficiency of the fan exceeding that of any other multi-blade type. It is uncxeelled for general drying purposes, and for supplying fresh, cool air to offices, private homes, telephone booths, staterooms, banquet rooms, railroad cars, kitchens, laboratories, etc., etc. Equally good results are



Size	Capacity Air per Minute	Horse Power	Speed Rev. per Minute	Weight	Height		Diam. Outlet	List	Prices
No. 1	90 cu. ft.	1 30	1800	25 lbs	81 in.	4	3	D. C.	A. C.
No. 2	250 cu. ft.	1 1 8	1800	45 lbs	10½ in.	51	4	\$ 50.00 75.00	\$ 50.00
No. 3	500 cu. ft.	1 1	1800	65 lbs	15 in.	7	6		120.00